

PROGRESS OF MEDICAL SCIENCE

SURGERY

UNDER THE CHARGE OF

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The Effect of Unilateral Extraction of the Intercostal Nerves upon the Lungs and its Tuberculous Disease.—**WARSTAT** (*Deutsch. Ztschr. f. Chir.*, 1917, cxxxviii) performed experiments on rabbits to determine the effect of the paralyzing of the intercostal nerves on the movements of the corresponding lung. Through a longitudinal incision at the external border of the erector spine muscle he exposed, with local anæsthesin, the first eleven intercostal nerves and divided them after separating them from the pleura. This was done distal to the giving off of the dorsal branch which supplies the back muscles. The distal portion of the intercostal nerve was removed by tearing it out, neuraxiaresis. The twelfth intercostal nerve was not removed because it did not innervate the respiratory muscles of the chest wall. The unilateral exclusion of breast movements by means of so paralyzing the intercostal nerves, so quieted and collapsed the corresponding lung, that it must favorably affect, if tried, a tuberculous process in the lung and promote its healing. He did a similar operation on two patients with lung tuberculosis. It is suitable for use in man because the operation is simple and secondary complications need not be feared.

The Treatment of Bony Defects of the Lower Jaw.—**McWILLIAMS** (*Ann. Surg.*, 1917, lxxv, 283) is convinced that no surgical lesion is generally so badly treated as infection and osteomyelitis of the inferior maxilla. This is due in the first place to timidity and ignorance on the part of the dentist who sees these patients in the beginning. His ill-advised attempts to save abscessed teeth lead to more or less wide spread necrosis of the jaw. Secondly, the general surgeon frequently attacks the necrosed area with the curet and chisel with too much vigor, thus increasing the necrosis by trauma. He reports 3 new cases and a second grafting operation on one of 2 cases previously reported. The main lessons to be learned from these patients are as follows:

Infection from the mouth at the time of making the grafts is absolutely fatal to the entire graft. A part only of the graft may necrose away. No grafting should be made in the presence of a sinus or into a granulating cavity. Grafting should be made any number of times until a successful result is obtained. In view of the great liability of bone grafts into the lower jaw to infection, McWilliams is inclined in his next cases to use costal cartilage as grafting material, since this is more viable than bony grafts and is not so liable to become infected. Absolute immobility of the lower jaw is a *sine qua non* to a successful result. Wiring the teeth proved more successful than splints. It should be maintained for three or four months after the grafting. The inlaying of the graft (always with its periosteum) into grooves cut in the sides of the fragment would seem to be a more scientific procedure than end-to-end grafting. Metal sutures had best not be used, owing to their liability to invite infection.

The Prognostic and Therapeutic Significance of Skeletal Metastases in Carcinoma of the Breast.—LEVIN (*Ann. Surg.*, 1917, lxy, 326) says that in the overwhelming majority of all cases of cancer of the breast the best surgical treatment do not completely eradicate the disease, but only prolong life. The correct treatment of carcinoma of the breast, complicated with skeletal metastases consists in the operative removal of the gross tumor mass combined with radium and roentgenotherapy. The radiations in a postoperative case of carcinoma of the breast should not be given only over the operative field and over the chest wall, which is the procedure generally adopted today, but should include, if not the whole skeleton, at least the spine and heads of both femurs. Moreover this combination of surgery and radiotherapy should be the method of choice in all advanced cases of carcinoma of the breast, even when there is not yet evidence of skeletal metastases. One of the important effects of radium and roentgenotherapy consists in the formation of an extensive connective-tissue stroma, surrounding and compressing the tumor cells. In skeletal metastases this stroma is transformed into bone. It is thus *a priori* self-evident that the radiotherapy must enhance the results of the attempts at cure produced by nature.

Renal Tuberculosis.—RYTINA (*Ann. Surg.*, 1917, lxy, 346) reports a study of 3 cases of renal tuberculosis. The first shows that an almost generalized tuberculosis of the genito-urinary tract may be present without the production of any grave symptoms and that following radical removal of the chief foci, rapid, spontaneous retrogression of the disease in the remaining organs can take place. The second case proves the erroneousness of the teaching of some surgeons that tuberculosis of the kidney can be diagnosed by inspection and palpation of the organ at the time of operation. Indeed, bisection of the kidney from pole to pole may fail to reveal the seat of an extensive tuberculous process. This point is worthy of emphasis, as Rytina has seen, in the last few years, several cases of renal tuberculosis which showed no evidence of its existence upon the surface of the kidney, but on section and examination of its interior a most advanced tuberculous condition. The moral of this is, that the diagnosis should be made prior to operation by the